The Ethnologic Affinities of the Ancient Eiruscans.

# By Daniel G. Brinton, M.D.

(Read before the American Philosophical Society, Oct. 18, 1889.)

The problem of the ethnologic position of the ancient Etruscans must be considered as yet unsolved. In spite of the prolonged labors of Corssen and Deecke, the theory that attached the Etrusci to the Indo-European stock rests on such feeble foundations that it is rejected by some of the ablest specialists in this branch; while the Turanian or Ugric origin, so vehemently advocated by Dr. Isaac Taylor, Mr. Robert Brown, Jr., and others, is now dismissed as untenable by all the continental Etruscologists.

As for those other hypotheses which connect the inhabitants of Etruria with the ancient Copts, with the Israelites, with the Lydians, with the Armenians, with the Hittites, with the Celts, with the Basques, and what not, they never had enough in their favor seriously to attract the attention of scholars.

One defect in these theories has been that they were all based on one ethnic element only. Their authors seem unaware that in the present condition of ethnologic science it is insufficient to deduce conclusions from the language only, or the arts only, or the legends, or the physical features only, of a nation; all these must be taken into account where the problem is complex, and the verdict of each must be carefully weighed.

My attention was especially called to this problem while spending some months in Italy early in the present year, where I had the opportunity of seeing the many museums of Etruscan antiquities which are so intelligently preserved and displayed in that country.

I had reached the Italian shores by the most ancient traveled route from the coast of Africa, that, indeed, which was taken by the pious Æneas himself, sailing from Carthage by way of the Isle of Pantellaria to Marsala, the ancient Lilybænm.

On a clear day one is rarely out of sight of land on this crossing; for no sooner do the bold headlands on either side of ancient Carthage sink in the south-west than the volcanic cone of Pantellaria rises in sight; and when that is lost to view the mount-

ainous coast of Southern Sicily is soon perceived. The distance between the two islands is not quite sixty English miles, an interval of space which was not enough to offer any serious barrier to even very early ploughmen of the Mediterranean main.

I dwell on these geographic details with a purpose, as you will see later; and I mention the fact of my journey in Africa, as it was the observations I made there which first led me to the conclusions I am about to present in this paper. Part of my time had been passed on the borders of what is called "la Grande Kabylie," that portion of the province of Algiers which is inhabited by the Kabyles, the most direct descendants of the ancient Libyans.

They are a strange people, these Kabyles, both in customs and physical aspect. Natives of Africa time out of mind, many of them present the purest type of the blonde races, blue or gray eyes, tawny beard, fair complexion, curly light or reddish hair, muscular in build and often tall in stature. When I came to look at the many evidently portrait busts on the tombs of the ancient Etruscans, there was something in the features, in the shape of head and face, which reminded me of these Kabyles. Slight as it was, it induced me to compare the two peoples in other details, and it is the result of this comparison which I now submit to be weighed and judged by those competent in such matters.

# § 1. Geographic Position of the Ancient Etruscans, historically considered.

Etruscan remains are found in Italy from the Gulf of Salerno to the River Po, and from the Tyrrhenian sea to the Adriatic. One inscription, indeed, has been unearthed at Verona,\* perhaps one near Chiavenna, and even at Chur I was shown one, in the Rhætian Museum, which the curator averred had been dug up near that city. Certain it is, however, that the right bank of the Po was substantially the northern limit of Etruscan culture.†

They were essentially city-builders and city-dwellers, and at the height of their power, which we may put about five or six

<sup>\*</sup>See Mueller, Die Etrusker, Bd. i, s. 157. References to this important work are always to the second edition (1877), edited by Deecke.

<sup>†</sup> Comp. Prof. G. Sergi, in the Archivio per l'Anthropologia, 1883, p. 139.

hundred years before the Christian era, they appear to have had three federations of twelve cities each, within the limits I have named. This statement might easily lead to an excessive idea of their numbers; but it is well ascertained that the Etruscans constituted by no means the bulk of the population. They were only the ruling class, a slave holding aristocracy, while the large majority of the inhabitants belonged to native Italian tribes, as the Umbri, the Osci, the Ligures, and others.

All the ancient writers recognize the Etruscans as intruders on Italian soil, and they themselves are said fully to have acknowledged this, and indeed to have had certain legends as to the time and place of their first permanent settlement on the peninsula. It is only in utter defiance of these semi-historic reports that Virchow and others\* bring them down from the Alps, across the plains of Lombardy, through the defiles of the Appenines, and at length to the shores of the Tyrrhenian sea. Neither the classical historians nor the Etruscans themselves knew a vestige of such a tradition. The erudite Otfried Muller, who has collected everything to be found in Greek and Latin literature concerning them, states that it is the unanimous testimony of antiquity that the earliest Etruscans reached the western shore of Italy, crossing the sea from the south; and he adds that it is undeniable (unleugbar) that such was the belief of the Etruscans themselves.† We know that by tradition and religious customs they assigned as their first permanent settlement the city of Tarquinii, the modern Corneto, on the shore of the Mediterranean, twelve miles north of Civita Veechia. To this venerable site the priests and soothsayers resorted from all parts of Etruria to perfect themselves in the pure and ancient "Etruscan discipline." Here their hero-god Tages, a wondrous gray-haired boy, sprang into life from a ploughed furrow, and taught their ancestors the mysteries of the diviner's craft and the nobler arts of life. This locality, I say, according to uniform tradition, was where their progenitors first established themselves, crossing the sea from somewhere to the south. Such a tradition, so definitely preserved, cannot be cast aside without sound reasons.

The date of this landing has been given by Müller at about

Prof. Virchow has expressed this opinion in the Verhandlungen der Berliner Gesellschaft für Anthropologie, 1884, p. 208, and elsewhere.

<sup>+</sup> Die Etrusker Bd. 1, ss. 66, 67, sqq.

two hundred and ninety years before the founding of Rome, while other writers are inclined to put it earlier by five hundred years. Between a thousand and twelve hundred years before the Christian era is probably as near as we can now fix it.

Now that the extensive excavations in Etruscan sites enable us to have a survey of the whole field of their operations, it is conceded more and more that the line of their migration was from south to north, from cisapennine to transapennine localities. Their settlements at Marzabotto, Bologna and beyond were visibly later and of briefer duration than in Etruria proper.\* The Etruscan alphabet of North Italy also reveals plain marks of degeneration, and the forms of the inscriptions are less archaic.†

# § 2. Physical Traits of the Etruscans.

We do not have to depend upon guess-work for a knowledge of the physical features of the Etruscans; we have a vast realm of mimetic art preserved, much of it unquestionably faithful to the originals, and in spite of the frequent custom of incineration, hundreds of genuine Etruscan skeletons have come down to us in a good state of preservation.

It surprises me that, in spite of this, and although the anthropometric results I am about to quote have been published for years, Dr. Deceke, in his recent edition of Müller's Etrusker, takes no note of them, but repeats the old statement that this people was short in stature, heavy-set, obese and dark.‡ Of course Dr. Isaac Taylor,§ in order to give countenance to his theory that the Etruscans were Turanians, is glad to adopt this opinion. He would not have liked to take cognizance of the modern anthropologists who have studied the subject, for nothing more fatal to his theory can be imagined than their results.

The old notion seems to have arisen from expressions in two late Roman poets, Virgil and Catullus, who speak of the Etruscans as fat; pinguis Etruscus and obesus Etruscus are their

<sup>\*</sup>Speaking of Marzabotto, the "Etrusean Pompeil," Prof. Eduard Meyer says in a recent article: "Ste' zeigt, dass die Nachricht der Alten richtig ist, welche die Etrusker von Süden her ins Po-Land vordringen lassen." (brrespondenz-Blatt der deutschen Gesell. für Anthrop., Ethnol. und Urgeschichte, Januar, 1889. He is fully supported by Prof. Sergi and most of the Italian archæologists who have studied the remains on the spot.

<sup>†</sup> Müller, Die Etrusker, Bd. ii, s. 529.

<sup>‡</sup> Die Etrusker, Bd. i, s. 64, note.

<sup>§</sup> In his work entitled Etruscan Researches.

words. It has also been commented on that the Etruscan cinerary urns frequently represent short, stout men, with disproportionately large heads and arms. This, however, was merely a technique of the national artists. They often put all their work on the upper, and effaced the lower portion of the figure, as not presenting individual characteristics. Where the full figure is shown, as in some beautiful specimens in the Museum at Florence, the squat appearance referred to is not apparent.

Fortunately we do not have to rely on the contradictory testimony of art to learn the stature of the Etruscans. The Italian anatomists have measured two hundred of their skeletons and from these have deduced, in accordance with well-known osteologic rules, the height of the average individual. The result shows them to have been an unusually tall race, the average of the two hundred persons having been 1.75 metres, or very nearly five feet nine inches.\* This is greater than the average height of our soldiers during the war, which was 1.70 metres, and is rather above the average of the soldiery of any European nation to-day, though less than some of the picked corps, the French carabineers, for example. It is a little more than the average stature of the Algerian Kabyles, who, nevertheless, are a tall race, averaging above 1.70 metres.†

Dr. Taylor and his followers do not fare better when it comes to cranial measurements. The typical skull of the Turanian stock is short and roundish—brachycephalic; that of the Etruscan was markedly of the long type—dolichocephalic. MM. Hovelacque and Hervé quote the results of three extended measurements of the cephalic index by Italian craniologists as showing 75.6, 76 and 77.3.‡ Less than a fourth of the crania can be called brachycephalic.§

It is interesting to compare these figures with measurements from the skulls of the modern descendants of the ancient Libyans—the Kabyles. According to data furnished by two excellent observers, MM. Topinard and Lagneau, these are respectively 76.7 and 77.3, almost absolutely the same as for the old Etruscans.

There is a current tradition in Italy that the Etruscans were

<sup>•</sup> Paul Topinard, E'éments d'Anthropologie Générale, p. 198 (Paris, 1885).

<sup>+</sup> Ilnd., Chap. xlv.

<sup>1</sup> Hovelacque et Hervé, Précis d'Anthropologie, p. 577 (Paris, 1887).

A number of authorities are quoted to this effect by Prof. G. Sergi, in the Archivio per l'Antropologia e la Etnologia, 1885, p. 140.

blondes, with light hair and blue eyes. I met a Tuscan wine-merchant who lived near Florence, and he pointed with pride to his handsome blonde beard, informing me that his family claimed Etruscan descent and that his beard was proof of it! There is evidence from ancient art that this piece of folk-lore is correct, and the eminent anthropologist I have just quoted, M. Topinard, sums up, with his usual correctness, our anthropologic knowledge of this people when he says: "From the evidence before us we may decide that the Etruscans were of large stature, blondes, and dolichocephalous; while their predecessors, the Umbrians, were small and brachycephalous." \*

In all these physical traits we discover a coincidence with the ancient Libyan or true Berber type, as seen in the Kabyles of the Djurdjura mountains, the Riffans of Morocco, and the former inhabitants of the Canary islands, the Guanches. There is no doubt but that the last mentioned were a true branch of the Berber stock. The fragments of their language, which have been collected and critically edited by Sabin Berthelot † and others, prove that it was closely allied to the dialect of the Morocco Riffans. Their skeletons show them to have been an unusually tall race, quite a number of individuals ranging from six to six and a half feet in height. Their skulls present the same dolichocephalic index as the Kabyles, and that they were largely blondes is attested by the early navigators, who speak of their long yellow hair reaching down to below their waists.§ The presence of these blondes on the Canaries destroys the theory sometimes advanced that the blonde hue of the Kabyles arose from admixture with the Goths, at the period of the dissolution of the western empire; for the Canaries were peopled by the Berbers long before the Christian era, and Dr. Verneau has quite recently discovered Numidian inscriptions there. But for that matter this hypothesis is untenable for other reasons. The blonde Berbers are referred to on Egyptian monuments, and as for the

<sup>\* &</sup>quot;Les Etruscains etaient grands, blonds et dolichocephales," Eléments d'Anthropologie, p. 498.

<sup>†</sup> Antiquités Canariennes, Paris, 1879.

<sup>‡</sup> Dr. R. Verpeau, La Taille des Anciens Habilants des Iles Cunaries, in the Revue d'Anthropologie, 1887.

<sup>§ &</sup>quot;Crines longos et flavos usque ad umbilicum feré," says the chronicler of the expedition sent out by Alphonso IV. Ample evidence is collected by Berthelot in the Bulletin de la Société d'Ethnologie, 1815, p. 121, sqq.

Revue a' Anthropologie, 1887, p. 650.

Goths in Africa, they had entirely disappeared as early as when Procopius wrote his history. \*

All this goes to show that the physical type of the ancient Etruscans was the same as that of the ancient Libyans and entirely distinct from any then existing on the Italian or Hellenie peninsulas. This identity can be traced in other features of importance to the anatomist. The orbital index of the modern Kabyles is 88.1, of the Etruscans 87.4, a remarkable approximation; the nasal indices of both range between 44 and 49; in both there is a lack of accentuation of the cranial prominences. †

#### § 3. The Culture Elements of the Etruscans.

Wherever the first settlers of Tarquimi came from they do not seem to have brought with them the higher arts of life. Most of these were later acquisitions, learned from their neighbors, the Greeks of Sicily and Magna Grecia, and in longer voyages for trading and piracy, which extended to Greece itself, to the coasts of Asia Minor, to Egypt, and to the Semitic cities of Palestine and their colonies at Carthage and elsewhere. Etruscan art yields positive testimony to all these influences, especially that of the Greeks. The Etruscan alphabet appears to me to have been derived directly from the Greek, and not from the Phenician, as Rawlinsont and others have thought. We must carefully exclude all these external borrowings if we would make a correct comparison of real Etruscan culture-traits with those of other nations. When this is done, it will be found that, in some characteristics, they stood in bold relief from all the nations I have mentioned.

No one of these is more conspicuous than the position assigned to woman in Etruscan civilization. It was in astonishing contrast to her place among the polished Greeks, and still more so to her station in oriental life. With the Etruscans, evidently a strictly monogamous people, she was the equal and the companion of her husband. She sat by his side at the feasting board, she was

<sup>•</sup> Quoted by Berthelot, ubi suprå, p. 141, note. Topinard identifies the Libyans with the Lebon and Tamahou, ensuries of the ancient Egyptians, and figured on monuments of the Nineteenth Dynasty as of lofty stature, blondes, with blue eyes and long, waving, yellow hair. Eliments d'Authropologie, p. 209.

<sup>+</sup>The details of these measurements may be found in the works of Topinard and of Hovelacque and Hervé, already quoted.

<sup>1</sup> in his work, The Origin of Nations (New York, 1881).

cared for in the most attentive manner, her image was carved with his on their common tomb, and there are a thousand evidences that she was not merely the idol, but the honored helpmate of the man. It was from this Etruscan example that early Rome drew the principle of monogamy and of the substantial independence of woman; and whatever we have of that noble element in modern life, it is a legacy through Rome from ancient Etruria.

This was decidedly neither a Hellenic nor an eastern principle, but we do find it from the earliest times among the Berbers. Even in spite of the polygamous doctrines of Mohammedanism the woman still retains her position in Kabyle life as the companion and helpmeet of man. Their Kanoun, or ancient code of laws, often in conflict with the Koran, and always respected in preference to it, protects her autonomy in a variety of ways,\* and the independence of her position has been a frequent theme of comment with travelers.

Another marked and peculiar element in Etruscan life was the recognition of the principle of confederation in politics. Their league of twelve independent cities was the first of its kind in the ancient world. Canon Rawlinson foreibly points out how far it was superior to the temporary and unstable alliances of the Greeks.† In this lay the secret of the rapid and great success of Etruria.

Here again is a singular identity with North Libyan governmental features. The very word Kabyle—the Arabic q'bail—neans "confederation," and refers to their ancient system of a political union of thoroughly independent communities. Nor is this a recent growth. The name by which the Kabyles were known to the Latin writers was Quinquegentes, "the Five Nations," referring to the coalition which then as now existed among them.

The Etruscans were bold navigators. For more than a century—600-500 B. C.—they were the virtual masters of the Mediterranean. It may be objected that in this they were unlike

<sup>\*</sup>The Kanoun of the Algerian Kabyles has been published, in full, by MM. Hanoteau et Letourneux, La Kabylie et les Coulumes Kabyles (Vol. iii, Paris, 1873). See also on the position of woman among the Kabyles, L. Piesse, Algerie et Tunisie, p. 1xv (Paris, 1888).

<sup>†</sup> In the Origin of Nations, above quoted.

PROC. AMER. PHILOS. SOC. XXVI. 130. 3M. PRINTED NOV. 18, 1889;

the Libyans; but it must be remembered that the Libyans undoubtedly did at that time venture out into the Atlantic as far as the Canary islands and peopled them—a greater distance from land than the passage of the Mediterranean requires.

I can not pursue this parallel in other directions, for lack of material. We know something about the Etrusean religion; but Christianity and Mohammedanism have effaced every vestige of the ancient cult of the Berbers. The architecture of the Etruscans was wonderful, but beyond the fact that the ancient Libyans were builders of megalithic monuments and of dwellings of cut stone,\* little has come down to us regarding their knowledge of this art.

### § 4. The Etruscan Language.

One of the ablest of ancient historians, Dionysius of Halicarnassus, asserted that the Etruscan language was sui generis, without affinity with any other. Such seems to have been also the most recent verdict of modern linguistic research. Dr. C. Pauli, one of the best authorities on it now living, pronounces all attempts to trace its relationship to be failures;† and Dennis, the learned English Etruscologist, states his opinion that it is as isolated as the Basque.‡ Dr. Pauli, indeed, decries all attempts to trace, in the present state of our knowledge, its affinities, and himself sets the example of studying it from its own monuments alone.

These monuments are not insignificant. We have preserved to us, more or less complete, over six thousand inscriptions in the Etruscan alphabet and language, a few of them bilingual, usually with the Latin. We know the value of the Etruscan letters, and up to a certain point the phonetics of the tongue. Some words have been preserved to us in Greek and Latin writers with their meanings, and the sense of others can be approximately made out from their recurrence in a great many inscriptions of a certain

<sup>\*</sup>There is evidence from Latin writers that the Tuariks, one of the purest blooded of the Berber tribes, constructed dwellings of cut stone before the advent of the Roman legions. For the extracts showing this, see an article by N. Bibasco, on the Kabyles, in the Revue des Deux Mondes, Dec., 1865.

<sup>†</sup> In his suggestive essay, Die wahre und die falsche Methode bel der Eutziferung der Etruskischen Inschriften, printed in the Alttalische Studien for 1885.

<sup>1</sup> The Cities and Cometeries of Etruria, Introduction.

class. We also have the numerals, and a multitude of proper names, personal and geographic.

If with this apparatus at command I venture to disregard Pauli's warning, and to institute a comparison between the Etruscan and Libyan languages, it is because I think the material is sufficient at least to be worth the attention of students. So far as I know, no one has attempted any such comparison before; nor do I find that this possible origin of the Etruscans has as yet been advanced, obvious as it seems to be.

One reason of this has doubtless been the extremely little available knowledge of the Libyan tongues, ancient or modern. What we do definitely know may be briefly rehearsed.

The modern Libyan, or Berber, is spoken by hordes scattered from Timbuctoo to the Mediterranean, and from the shores of the Atlantic to the borders of Egypt. It is divided into a number of dialects which are phonetically grouped into two classes, the "strong" and the "weak," characterized by the regular transformation of certain consonantal sounds, principally k to l, t and  $\theta$  to d or r, s to ch, etc. When the action of these phonetic laws is understood and allowed for, the fundamental unity of all the dialects becomes apparent, both in their vocabulary and grammar.\*

The themes are both nominal and verbal, but the latter are much the more numerous and form the grammatical characteristic of the group. They are nearly all consonantal, and may be of one, two, three, or four letters, subject to internal vowel change, and modification of the idea by prefixes and suffixes.

The modern Kabyle, which has adopted many Arabic words, is written with the Arabic alphabet, which, however, does not render correctly some of its sounds. The Touareg, the dialect of the desert, has preserved an alphabet of its own, no doubt a form of the ancient Numidian, which in turn was derived from the Semitic Carthaginian. The Tamachek, as this venerable A B C is called, does not express the vowel sounds nor separate the words. It is said to have been retained principally through the efforts of the women, who are the literatæ of the tribe.†

<sup>\*</sup> René Basset, Manuel de Langue Kabyle, p. 3 (Paris, 1887).

<sup>†</sup> This statement is made by Bibasco, in the article above quoted, *Revue des deux Mondes*, Dec., 1865. The Tamaehek alphabet is given by Hanoteau in his *Grammaire Kabyle* (Paris, 1860). This writer adds that the Touareg is one of the purest dialects of the Berber tongue (id., Introd., p. xiii).

The ancient Libyan or Numidian was the parent stem of these dialects. Some hundreds of inscriptions in it have been preserved, a few of them bilingual, so there is a possibility that we may recover the grammar of this now lost tongue.\* Prof. Newman, indeed, has made an effort to restore it from modern Berber dialects;† but I am surprised that he has made no use of this valuable epigraphy.

These various Libyan dialects form the western branch of a large family of tongues, of which the eastern branches include the modern and ancient Coptic, the Abyssinian and others. The whole family has been called *Hamitic*, or *Cushite*, or *Proto-Semitic*, of which terms the first is the best, simply because it conveys no preconceived hypothesis. The grammar of all the Hamitic languages shows similar traits. The nouns have a masculine and feminine form; the radical may be of one or more syllables and, unlike the Semitic tongues, it remains unaltered in the process of word-building; there are plural but not dual forms; relation is expressed by both prefixes and suffixes; and the verb originally had but one form, instead of the two or more found in the Semitic languages.‡

The general grammatic aspect of these languages, however, leaves no doubt but that at some remote epoch they were derived from the same original form of speech from which the Semitic languages trace their descent; hence, they are classified as the *Hamito-Semitic* stock.

Where was the original seat of the tribe who spoke this parent tongue has not been ascertained. The uniform opinion of scholars has been that it was somewhere in Western Asia; and though the question does not immediately concern the present discussion, I cannot forbear adding that I hold this to be a mistake, and that the original seat of the Semites was on or near the Atlantic coast.

It is with the Libyan branch of the Hamitic family of languages that I shall proceed to compare the ancient Etruscan.

<sup>\*</sup> They have been edited by General Faidherbe, Prof. Halévy, Reman and others.

<sup>†</sup> Libyan Vocabulary; un Essay toward reproducing the Ancient Numidian Language. London, 1882.

These are substantially the characteristics of the family as traced by Friedrich Muller in his Grundriss der Sprachwissenschaft, and by Hovelneque in his work, La Linguistique.

The Etruscan alphabet, as I have already said, was derived from the Greek. It represented twenty sounds, as follows:

Vowels: a, e, i, u.

Mutes: c = k,  $p, \varphi, t, \theta, \chi$  (guttural).

Linguals: 1, r. Nasals: m, n.

Sibilants: s', s, z (s' = soft s); (z, originally ts).

Spirants: h (spiritus asper), v (= u), f (the digamma).

It will be noticed that the vowel o was not expressed, and that a number of consonantal sounds found in Latin and Greek are absent.

The orthography of the Etruscan inscriptions shows either that these letters did not fully express the sounds of the language, or else that it possessed many phonetic variations. The principal of these are as follows:

h into f, y,  $\varphi$ ,  $\theta$ , and vice versa.

t into  $\theta$ , h, d, and z, and v.v.

s into c or z, and v.v.

Initial e and terminal n were often omitted.

It is certain there were various vowel sounds which were not written; there is no doubt, for instance, of the identity of the forms epl and pul; of  $epr\theta ne$  and  $pur\theta ne$ , etc. The extent of these changes has very properly been made a subject of careful study by the epigraphists.\*

Very little has been gleaned from the inscriptions as to the grammar of the Etruscan. The best authorities on the subject are Deecke and Pauli, and both agree that the Etruscan nouns have a gender presenting masculine and feminine forms, by this cutting the language off of all connection with the Turanian stock. The nouns have also plural terminations, and both nominal and verbal themes are modified by suffixes and less frequently by prefixes. Pauli considers the demonstrative pronouns to be, "without doubt," an, cen and mi(n).

Conjugations and declensions have not been fixed, though it is believed that a terminal s, often attached to words, is the sign of the genitive or possessive case; and a terminal ce seems to indicate a past tense in verbals. A terminal -c and -m are supposed to be suffixed copulative conjunctions, like the -que in Latin.†

<sup>\*</sup> On these phonetic variations, see Pauli in Etruskische Forschungen und Studien, 1882, Heft iii, ss. 18, 23, 27, 28, etc., and elsewhere. Also Deecke, Appendix on the Etruscan Language, in Müller's Die Etrusker, Bd. ii.

<sup>†</sup> For these particulars, compare Deecke in Etruskishe Forschungen und Studien, 1882, Heft ii, s. 62, sq., and Pauli in the same, Heft iii, s. 146, and elsewhere.

These meagre outlines give small chance for comparison; but there is nothing in them to contradict the theory of Libyan affinities. The latter has also masculine, feminine and plural forms of nouns, and though it has strictly no declensions, the terminal s is found in it with the same possessive signification. It is not a case ending, but the possessive pronoun of the third person, "his" or "her." As for articles, † definite or indefinite, there is none, either in Etruscan or Libyan.

The ascertained vocabulary of the Etruscan is a short one. The classical writers have handed us down a few words more or less disfigured no doubt; and certain constantly recurring words on inscriptions give chance for a fair guess as to what they must mean. From these sources I present the following list, marking those from ancient writers with an asterisk, and some from modern students with their initials. The list includes, I think, every Etruscan word of which we know the probable meaning.

## Etruscan Vocabulary.

```
*aesar, deity, divinity.
*antar, eagle.
*aukelos, aurora, dawn.
*ataison, the vine.
aθ, man, vir, D.
ara, race, family, "gens," P.
atar, family, P.; house, D.
avil, year; old; aged; "etas."
alpan, image, statue; gift; "supplex," E.
zama, gold, P.
```

 $zi/a\theta$ , a priestly title, D.

Oura, descendant, D., P.; brother, Sch. Orafna, cup. vase. Oaura, grave, sepulchre. Oui, he lies, "cubat;" Oui cesu, "hic cubat."

<sup>.</sup> Thu, akhkham, house; akhkhamis, his or her house. Basset, Manuel de Langue Kabyle p. 12. The utilix is either s, is, or es.

I Prof. A. H. sayce has attempted to show that the suffixed -s or -cs in Etruscan is the d fulle article, but I have not observed that this opinion has been adopted. Allitalo he Stud in, 18 , Heft H, pp. 127, 128.

<sup>;</sup> P - Paull , D. - Doecke ; E. - Ellis ; Sch. - Schaefer B. Bugge, etc.

iχu, a stone (or eχu).itun, a pot, a vase, P.\*ituo, to divide.

eca, this; here, P. Subst. verb "to be," D., B., etc. etera, a freedman; a slave; a servant.

ca, this; cav, in this; or ceher, or cn.

ceχa, tribe, P.; an official priestly title, meaning holy; or sexigenarius from ceχa, sixty, P.

cexasie, a priest or priestly title.

capi, a vessel, a cup.

clan or clen, a son, P.; "sepulchral," from cela, grave-vault, "grabkammer," B.; "soboles or princeps," E.

caru, or cares, or cerinu, or cerizu, a monument or tomb; a memorial; "sculpit," E.

cver, a gift; a present; an offering; "soror," E. \*cassis, a helmet.

hin0ia, a ghost or departed spirit.

\*falando, the sky, heaven.

frontac, the lightning thrower, "fulguriator."

farthana, monument, P.

\*lar, lord or chief; a household god; elder brother.

\*lūcūmo, a prince, a priest, lit. "inspired," "possessed."
lautni, slave; freedman; family.
leine, died; to die; "vivit," E.
lupu, to die; died; dead.

maru, marva, or marnu, a priestly title, D. malena or malstria, a mirror.

mi, this, P.; to be, D.

muki, a cup, a bowl.

mur or mur-s, a grave, a sepulchre.

mulun, to give; to dedicate or consecrate.

mutna, a tomb, a sepulchre.

penθna, a stone, P.
puia, a wife, P.; a daughter, E.

ril, to live, lived; ril avil, "vixit annos;" a year, E.

\*tamnos (δαμνος), a horse.
tular, a stone; a monument; public, D.; tomb, E.
tur-, to give, to make an offering.
tiv-s, moon, month.
trvtnvt, a soothsayer, Lat. "haruspex."
tesan, a dedication; ten.

usil, sun, day.

\*verse, fire; "averte."

qleres, a statue, an image; an offering.

nefts, grandson; probably Latin "nepos."
netsvis, augur.
nipe, cup, vase.
nesl, a grave, a sepulchre, "mortuus," E.
nacnva, a grave, a tomb.

spura, town, city, commonwealth, "res publica," D.; conqueror, P.

sex, daughter.

swith, sepulchre, tomb, burial place, D.; "it is," P. suoic, property; it belongs to, P. swa-ce, to live, lived.

There are a number of these words which, I think without straining, may be explained from Libyan roots. I take them up in the order in which they are arranged in the vocabulary:

Aesar, a god. This may be derived from the Libyan (Tuareg) asr, light; esan, lightning; as deus from deva, the bright, the shining one. The lightning is the constant accompaniment of the chief Etruscan deity.

Aukelos or ankelos, the dawn, the daybreak. This appears certainly to be allied to the Kab. verb akker, to rise; \(\theta enker\), the sunrise, the dawn.

Ataison, the vine; Kab. Osa.

- A0, man; ara, descendants, gens; atar, family. These are extremely important words, frequently recurring on the sepulchral inscriptions and at the commencement of proper names; also in the connection clen-ar-, "son (?) of ar-." They constitute one of the strongest points of evidence of the Libyan origin of the Etruscans, for in all the Libyan tribes this syllable at-, ar-, ath or ait, is the sign of tribal kinship, like the Beni of the Arabs. In the dialect of the Guanches it appears with precisely the same form and meaning as in Etruscan, at, ad and ar, as the initial syllable of many words.\* In the Tuareg we find arach, offspring, etc. All are from an ancient Libyan monoliteral root R, seen in Kab. arou, erou, aor. irou, "produire, engendrer," l'arach, "tribu," etc.†
- Alpan, an image or statue. This seems to me the most likely meaning of the word. In the Tuareg dialect awan, which has the same signification, seems a weakened form of the same root.
- Zila0; believed by Deecke to be the title of a priest. This is probable, and connects it with the Kab. zelir, aor. izla, to sacrifice; the zila0 being the "sacrificer."
- θura, descendants, children (D. and P.); brother (Sch.). This is another striking identity between the Libyan and Etruscan in terms of relationship. It is the Kab. θerga, Guanche t'hu-, as a prefix to the name of a gens. These parallels confirm the correctness of the rendering of the inscriptions.
- θrafna or θarfna; a cup or bowl. Compare the Berber tarbut or tarfut, an earthen dish.
- Izu or ezu, means a stone or something of stone; cerizu, a stone tomb. The same root seems to appear in Kab. azekka, a stone tomb.
- Ituo, an Etruscan word preserved by Festus, with the meaning "to divide." It seems plainly identical with the Kab. ibdha, to divide; Tuareg, itzun, he divided.
- Cver, to give, is not remote from the Kab. root fkr with the same signification.
- \* Berthelot,  $Mémoire\ sur\ les\ Guanches$ , calls especial attention to this linguistic trait as connecting the various Berber tribes.
- †P. Olivier, Dictionnaire français-kabyle (Le Puy, 1878). I do not much rely on this work, as it lacks critical value.
  - PROC. AMER. PHILOS. SOC. XXVI. 130. 3N. PRINTED DEC. 11, 1889.

- Eca; this word begins many inscriptions, and appears to mean "this" or "here," and has been usually so rendered. It would thus correspond with the Kab. agi, which has the same senses. Others think it the substantive verb; Kab. eg, to be, aorist, iga.
- Ca or ke, rendered by Pauli as the demonstrative "this," is identical in sense and sound with the Kab. demonstrative gi (g hard).
- \*Lar; this term frequently occurs with aruns, and by some the former is supposed to be elder, the latter younger brother; or that lar, lars, or alar0 = chief, lord. I suspect both are from the Libyan root ar, to beget, engender, whence Kab. argaz, man, etc. See above under  $a\theta$ .

Maru; a priestly title. Comp. Kab. mer, to teach.

Mur-s, grave; properly "his grave." Com. Kab. mūth, death; emmout, or emmeth, to die; medhel, to bury.

Mutna, a tomb; probably from the same Libyan root, mut, as mur, q. v.

Tamnos, a horse. This may be a Hellenized form of the word for "mare," Kab. thagmarth, where the th initial and final is the sign of the feminine gender.

Tur, to make an offering. Comp. Kab. Oarzefth, pl. tirdzaf, an offering.

Tiv-s, moon, month. Comp. Kab. tiziri, moon, month.

Usil, sun, day. The Kabyle term for the midday sun is asal, and it is noteworthy that the Etruscan day began when the sun was at high noon.\*

#### The Etruscan Numerals.

It is confidently believed among Etruscologists that we know the words for the first six numerals in that language. They are found inscribed on a pair of dice exhumed near Toscanella in 1848. A serious difficulty presented itself, however, in ascertaining in what order these words should be read. The majority of ancient dice have the pips so arranged that the sum of the opposite sides equals seven, thus: 1+6, 2+5, 4+3. A number of North Etruscan dice have been reported where this is not the order, but the following: 1+2, 3+4, 5+6. Dr. Pauli avers that no other order of the pips

<sup>.</sup> Maller, Die Etrusker, Bd 11, s. 301.

on Etruscan dice has been observed;\* but in this he errs, as Mr. Stewart Culin, who closely examined the Etruscan dice in the British Museum, informs me that more than ten per cent of them show yet other arrangements, so that it is quite possible that the dice from Toscanella should be read on a scheme differing from both the above.

The six words on the dice in the order in which I should propose to read them are:

In assigning these their respective values of 1, 2, 3, 4, 5, 6, I am supported by many of the leading students of the subject, as the following list will show:

Etruscan Word.	Value.	Authorities in favor.	
ma,	Ι,	Campanari, Pauli, Taylor, Ellis, Bugge,	
		Brown.†	
ci or ki,	2,	Taylor, Deecke, Brown.	
zal,	3,	Campanari, Taylor, Ellis, Brown.	
hu0,	4,	Campanari, Pauli, Ellis.	
021,	5,	Taylor, Brown, Pauli.	
sa,	6,	Campanari, Bugge, Ellis.	

I need not rehearse the evidence in support of these values. It is derived from patient comparative study of inscriptions in which these numerals occur, and is certainly as well substantiated as any other.

It is well known that the numerals present a most valuable standard of linguistic comparison, and the utmost efforts, therefore, have been put forth to exhibit some relationship of the above words to the numerals of some other tongue. The result has been utter failure in every instance, as has been vigorously stated by the acute

<sup>\*&</sup>quot; Antike Würfel mit anderer Ordnung glebt es durchaus nicht." Pauli, Etruskische Forschungen und Studien, 1882, p. 11. So far is this from being correct that I have the notes of over a dozen irregular ancient dice, observed by M. Culin in the collection of the British Museum aloue.

<sup>†</sup> Mr. Robert Brown's article is the latest study of Etruscan numerals. It is in *The Archaelogical Review*, for July, 1889. Unfortunately its value is impaired by the writer's devotion to Dr. Taylor's notion of the Turanian origin of the Etruscans. Pauli on *Die Etruskischen Zahlwörter* may be found in the *Etruskische Forschungen und Studien*, for 1882; and Bugge partial discussion of them in the same journal for 1883. For Ellis' opinion see his *Asiatic Affinities of the Old Italians*, p. 51, sqq.

investigator, Pauli.\* So far as I know no comparison of them with the ancient Libyan has heretofore been attempted.

It is important at the outset, to note that the above numeral adjectives belong to a rather late Etruscan period, and do not present the ancient forms of the words. These have been obtained by a comparison of ancient inscriptions, and are presented as follows, by Pauli and others:

I, mex; † 2, cin; 3, sals; ‡ 4, hut; 5, ouns or fnes; § 6, sas.

These are the forms which we must use for our comparison as being the most archaic.

A similar process must be carried out with the modern Libyan numerals; we must restore them to their earliest forms.

At present the Kabyles employ the Arabic numerals for values higher than two. Recourse must be had, therefore, to the Tuariks and other tribes who retain the old expressions. An examination proves that the ancient Libyan was a quinary system, based, as most primitive numeration, on counting the fingers. The word for hand, fous, still means five in several of the dialects, as the Djerba and the Mzab.|| In these quinary systems, drawn from the fingers, the word for one often means "the little one," referring either to the short thumb or the little finger. At present the word for one in the Berber dialects is some variation of en, which seems a loan word from the Greek or early Latin ( $\varepsilon \nu$ , unus). Probably their native expression was mekk, or mex, which means "a little one;" for not only is that in accord with the general rule of quinary tongues, but we find the Cretans used the word  $\tilde{a}\mu a\chi cz$ , borrowed, probably, from the Libyans, in the sense "a single one" (Bugge).

<sup>\*</sup> His words are: "So wenig die Etruskl<br/>schen Zahlwörter indogermanisch sind, so wenig sind sie mit irgend einer andern bis jetzt verglichenen Sprache verwandt, sie stehen bis jetzt vollständig isolirt,"  $ubi\ supra$ , p. 148.

<sup>†</sup> See C. Pauli on the Etruscan Inscription in the Museum of Leiden, in Attitalische Studien, 1884, p. 61.

<sup>‡</sup> Bugge gives as other forms of zal, these variants—zeral, zelar, zerar, zerin, Elrusk. Forsch. u. Studien, 1883, p. 156.

 $<sup>\</sup>S$  The form fnesi, where  $\theta$  has passed into f, a frequent permutation in the inscriptions, bequoted by Bugge, from the Inscription F. 2335d.

Basset, Manuel de Langue Kabyle, pp. 70, 71.

f" Number," says J. Hammond Trumbull, in his philosophical essay on the numerals in American tongues, "begins at 'two," and we may assume that 'two' was the first named numeral, though an earlier conception may be expressed in the name given to cone." He adds that, in "many" American languages, the expression for "one" means "the little one," "the least," the reference being to the finger. Transactions of the American Philotopical Association, for 1874, pp. 50, 72.

The modern Libyan for two is sin; for three, karat (in the Gdhames dialect, kalat; in Bilin, sadu or salu); four in modern Kabyle is akoz, which may be remotely connected with the word for four in the eastern dialects of the Hamitic family (Coptic,  $fe\theta u$  and ftou); six in Kabyle is sez, in the ancient dialect of the Guanches (Canary islands), sas-etti, evidently identical with the old Coptic sas.

With these restorations I would place the two alphabets side by side as follows, showing the consonantal roots at the base of the numerals in accordance with the spirit of the Hamitic languages:

Archaic Etruscan.	Archaic Libyan-Hamitic.
1. M <sup>e</sup> χ.	M°χ.
2. Sin.	S <sup>i</sup> n.
3. Sal.	Sal.
4. Fut.	Fut.
5. Funs.	F <sup>u</sup> s.
6. Sas.	S*s.

The similarity here displayed appears to me quite convincing that the Etruscan, if not a Libyan dialect, was certainly a branch of the Hamitic family, with closer relations to the Libyan than to the eastern dialect of the family.

It would be profitable to continue this comparison between the Libyan and Etruscan into the domain of proper names, geographical, personal and tribal, for which there is considerable material. At some future time I hope to accomplish this, but at present I shall confine myself to two prominent examples, one, the native names of the Etruscan people, *Rasena*, or Etrusci, the other, the name of their hero-god or mythical tribal ancestor.

The historian, Dionysius of Halicarnassus, states that they called themselves "Rasena," and the forms rasn and rasnia are found on inscriptions, in connections where the signification "people" or "folk" would be suitable.\* On the other hand, Dr. Pauli believes that there is strong testimony that their native name began with turs, which, by elision of the vowel and adoption of a suffixed e, became Etrs-ci, or more fully Etrusci.†

<sup>\*</sup>Ras'an, populus; rasena, popularis; ras'nia, Etruria, are the proposed renderings of Pauli. Altitalische Studien, 1884, p. 60.

<sup>†&</sup>quot; Das vorgesehlagene e ist im Etruskischen mehrfach nachweisbar. Etrusct = Etrsc = Tursei—dies ist ein Beweis das der etnheimische Name der Etrusker mit turs begann." Pauli, Etrusk. Forsch. und Studien, 1882, p. 18.

The only method to bring these statements into unison is to consider Ras the biliteral radical; et or 't, the prefix; and enna and ci, suffixes of different sense. This suggestion harmonizes the inscriptions, bears out the statement of Dionysius, and moreover finds its explanation in the Libyan. The prefix et or 't is the modern ait, Guanche at, which I have before shown is repeatedly seen in Etruscan. It conveys the sense "the children of Ras," or "those of Ras." What this "Ras" may mean I am not sure; but that it was a local name of some importance in ancient Libya is evident from the list of Roman bishoprics before the arrival of the Arabs, two of which, in the heart of the Kabyle country, were named Rus-ucurru and Rus-azouz.\* The termination enni in Kabyle is the suffixed demonstrative pronoun, and is equivalent to "those of Ras," or "the Rases," supplying the place, in a manner, of the prefix et.† The ci (ki) or yi is a suffix which appears also to be demonstrative.

The name of their hero-god, considered by some to be allied to the radical turs, is tarz. It is seen in the appellations Tarquinius, Tarchetius, and the like. These doubtless refer back to Tarchon, the mythical founder of the first settlement at Tarquinii, and the father or finder of the hero-god Tages (Tarzes), to whom I have before referred. To him the royal line of the Tarquins traced their origin. It is not easy to combine this radical with ras, and I prefer to believe them distinct. In the form taz or tar, it is quite common in the Libyan dialects. It appears in the name of the Numidian rebel who gave the Emperor Tiberius so much trouble, Tacfarinus, and M. Berthelot pointedly calls attention to its frequency among the Guanches of the Canaries. The signification of the radical I leave for future investigation, mentioning, however, the root A-GH-L or A-GH-R in modern Libyan, from which the Kabyle words aghalik, king, and Oagheldio, kingdom, are de-

<sup>\*</sup> Hanoteau et Letonrneux, La Kabylie et les Coulumes Kabyles, Tome i, p. 312. This of course proves that it is not the Arabic ras, head, cape.

<sup>†</sup> Basset, Manuel de la Langue Kubyle, p. 17. This suffix is invariable, c. g., argaz-enni, that man; irgazen-enni, those men. It occurs elsewhere in Etrusenu as Cleenna, Vipina, Spurina, Pors-enna, etc. Bugge thinks it appears in the termination annat. See Etruskie he Forschungen und Studten, 1883, Heft iv, ss. 4-6.

<sup>\*</sup> Mémoire sur les Guanches, in Mémoires de la Société d'Ethnologie, Tome il. One might be inclined to bring the tribal appellation Tuarek into this connection; but Wetzstein and others consider it an Arabie form from terek, "relinquere." See Zeitschrift fur Ethnologie, 1887, p. 35.

rived, the latter of which would give the Latinized forms tac or tarq.

In conclusion, I would submit the following as the results of this inquiry:

- r. The uniform testimony of the ancient writers and of their own traditions asserts that the Etruscans came across the sea from the south and established their first settlement on Italian soil near Tarquinii; this historic testimony is corroborated by the preponderance of archæologic evidence as yet brought forward.
- 2. Physically the Etruscans were a people of lofty stature, of the blonde type, with dolichocephalic heads. In these traits they corresponded precisely with the blonde type of the ancient Libyans, represented by the modern Berbers and the Guanches, the only blonde people to the south.
- 3. In the position assigned to woman and in the system of federal government the Etruscans were totally different from the Greeks, Orientals and Turanians; but were in entire accord with the Libyans.
- 4. The phonetics, grammatical plan, vocabulary, numerals and proper names of the Etruscan tongue present many and close analogies with the Libyan dialects, ancient and modern.
- 5. Linguistic science, therefore, concurs with tradition, archæology, sociologic traits and anthropologic evidence, in assigning a genetic relationship of the Etruscans to the Libyan family.

Stated Meeting, October 18, 1889.

Present, 20 members.

Vice-President, Dr. RUSCHENBERGER, in the Chair.

Correspondence was submitted as follows, viz.:

A letter from Bureau of Statistics of Labor, Commonwealth of Massachusetts, offering its publications to the Society and requesting exchanges, which was so ordered.

A letter from the Commissioner of Public Records of Parishes, Towns and Counties of Massachusetts, in reference to records reported as missing.